

ASSISTANT ENGINEER

DEFINITION

Under direction, to perform professional civil engineering work in the planning, design, technical investigation, and construction of projects in the areas of public works, transportation, capital improvements and structural engineering; to provide staff assistance to the Division Manager and others on complex issues or projects; and to perform related work as required.

CLASS CHARACTERISTICS

This is the journey level classification in the series not requiring registration. Incumbents perform the moderately difficult professional engineering work in civil engineering and receive general direction from the Senior Civil Engineer or Division Manager. Incumbents may have responsibility for technical or function supervision of assigned subordinate staff.

EXAMPLES OF DUTIES (Illustrative Only)

- Participates in the preparation of plans and specifications for the construction of streets, storm drains, street lighting, traffic signals, buildings and related public works and City building projects; researches project design requirements; performs calculations and prepares estimates of material costs and time considerations
- Researches publications and industry information sources
- Develops and revises design and construction standards
- Participates in the implementation of the City's traffic and transportation engineering programs; prepares and revises plans and specifications for traffic related projects; prepares special studies and reports and coordinates major projects
- Investigates field problems affecting property owners, contractors, and maintenance operations
- Prepares estimates and feasibility reports for new or modified services and structures
- Administers contracts for construction projects
- Participates in the plan check, review and processing of plans for private developments affecting streets, sewers, drains and related public works facilities and ensures that they meet all City imposed requirements
- Prepares special engineering studies and reports
- Coordinates planning, design, and construction activities with other City departments, divisions, and sections, and with outside agencies
- Attends various staff and regional technical advisory meetings
- Provides technical and professional assistance/support to other City departments and divisions, Planning Commission, and City Council as necessary

QUALIFICATIONS

Knowledge of:

- Civil engineering principles and practices as applied to municipal public works, including planning and development, design and construction, and operations
- Methods, materials and techniques used in the construction of public works and utilities projects
- Methods of project management and contract administration
- Materials and techniques used in the construction of public works projects
- Modern developments, current literature and sources of information regarding engineering codes and ordinances
- Methods and techniques of effective technical report preparation
- Applicable federal, state and local laws, codes and ordinances
- Modern office practices and technology, including personal computer hardware and software
- English usage, spelling, grammar and punctuation

Skill in:

- Making complex engineering computations and checking, designing and preparing engineering plans and studies
- Coordinating assigned activities with other City departments and agencies as required
- Performing technical research, analyzing problems, evaluating alternatives, and making sound recommendations related to assigned activities
- Reading, interpreting and applying technical written material and applicable laws, rules, regulations and codes
- Effectively administering construction contracts
- Reading and understanding technical drawings and specifications
- Performing mathematical and engineering computations with precision
- Communicating clearly and concisely, both orally and in writing
- Using computer technology and applications in the performance of daily activities
- Preparing and presenting clear, concise and logical written and oral reports
- Interpreting and applying City and Department policies, procedures, rules and regulations
- Establishing and maintaining effective working relationships with those contacted in the course of work

A typical way of gaining the knowledge and skills outlined above is:

- Equivalent to a Bachelor's degree with major coursework in civil engineering or a closely related field OR possession of an Engineer-in-Training certificate; and one (1) year of professional civil engineering experience.

LICENSES AND CERTIFICATES

Possession of a valid California driver's license

PHYSICAL DEMANDS

Mobility to work in a standard office or field environment, use standard office equipment and attend off-site meetings. On an intermittent basis, operate a motor vehicle on surface streets with occasional exposure to weather conditions, and construction and traffic hazards. Requires mobility to traverse uneven terrain, periodically standing, stooping, bending, climbing and kneeling to perform fieldwork; on an intermittent basis, sit at desk for long periods of time; lift light to moderately heavy weights. Vision to read handwritten and printed materials and a computer screen; hearing and speech to communicate in person and by telephone; manual dexterity to operate small equipment, tools and standard office equipment and supplies, and to manipulate both single sheets of paper and large document holders (binders, manuals, etc.).

FLSA: NE

This job specification should not be construed to imply that these requirements are the exclusive standards of the position. Not all duties are necessarily performed by each incumbent. Additionally, incumbents may be required to follow any other instructions and to perform any other related duties as may be required by their supervisor.